



American Cyanamid Company
Agricultural Division
P.O. Box 817
Hannibal, MO 63401
(314) 769-2011

October 24, 1989

Mr. John Smith
Environmental Engineer
United States Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101

RE: Fire Training Grounds

Dear Mr. Smith:

The purpose of this letter is to provide information on the site investigation we completed in September, 1989, in the area of the fire training basin at our Hannibal Plant. This area had been identified by the EPA as a SWMU during your RFA conducted in August, 1987.

As I indicated in previous submittals, we replaced the unlined clay basin which had been used as our fire training pond with a concrete basin during the fourth quarter, 1989. The new basin was constructed at the same location as the original basin. The bottom of the new basin was constructed below the bottom of the original clay basin. During the site preparation for the new basin we did not observe any subsurface contamination associated with our fire training activities.

To provide additional evaluation of the site, we conducted subsurface excavations in the area immediately adjacent to the new basin. We had a backhoe excavate four pits approximately 36"-48" deep with one pit along each side of the new basin. We collected undisturbed soils samples from each pit at a depth of approximately 36" below existing grade. This would be approximately 12"-24" below the bottom of the original fire training basin.

The excavated pits did not have any indication of contamination. The soils samples collected did not have any odor or visual indication of petroleum contamination. We had the samples analyzed for Volatile Organics and Total Petroleum Hydrocarbons in accordance with EPA Test Methods for Evaluating Solid Waste - Physical/Chemical Methods, SW-846. The attached Table A - Results of Soil Sample Analysis provides a summary of the results of these assays.



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As we discussed during our telephone conversation of October 23, 1989, the results of our visual inspections and subsequent soils sampling program did not indicate any significant subsurface contamination of the area related to our fire training basin. This correlates with the previous use pattern of the facility which involved one to two weeks of annual fire training activities for plant emergency response personnel. We feel the information obtained during this investigation demonstrates that this site does not warrant additional consideration as a SWMU and should not be included in the plant's RCRA Permit.

The completion of the new concrete basin will prevent any potential future contamination related to our fire training program. Water from the basin is removed following the training programs and periodically throughout the year to manage accumulated precipitation. The recovered water is then discharged through our NPDES wastewater treatment facilities in accordance with conditions of our NPDES permit.

If you have any questions with regard to information contained in this submittal or if you require any additional information regarding this project, please contact me at 1-314-769-2011, Ext. 2268.

Sincerely,

AMERICAN CYANAMID COMPANY
Agricultural Division

A handwritten signature in black ink, appearing to read 'J. Brad Willett'.

J. Brad Willett
Manager, Environmental Services

cc: Mr. Dan Tschirgi, MDNR
Mr. C. S. Decker, MDNR

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TABLE A - RESULTS OF SOILS SAMPLE ANALYSES

VOLATILE ORGANICS -

All soils samples were less than detectable limits for all compounds listed at the listed detectability levels for volatile organics.

<u>Compound</u>	<u>Detectability level</u>
Chloromethane	10 ug/kg
Bromomethane	10 ug/kg
Vinyl Chloride	10 ug/kg
Chloroethane	10 ug/kg
Methylene Chloride	5 ug/kg
Acetone	10 ug/kg
Carbon Disulfide	5 ug/kg
1, 1-Dichloroethene	5 ug/kg
1, 1-Dichloroethane	5 ug/kg
1, 2-Dichloroethene (total)	5 ug/kg
Chloroform	5 ug/kg
2-Butanone	10 ug/kg
1, 2-Dichloroethane	5 ug/kg
1, 1, 1-Trichloroethane	5 ug/kg
Carbon Tetrachloride	5 ug/kg
Vinyl Acetate	10 ug/kg
Bromodichloromethane	5 ug/kg
1, 2-Dichloropropane	5 ug/kg
trans-1, 3-Dichloropropene	5 ug/kg

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Trichloroethene	5 ug/kg
Benzene	5 ug/kg
Dibromochloromethane	5 ug/kg
cis-1, 3-Dichloropropene	5 ug/kg
1,1, 2-Trichloroethane	5 ug/kg
Bromoform	5 ug/kg
2-Hexanone	10 ug/kg
4-Methyl-2-pentanone	10 ug/kg
Tetrachloroethene	5 ug/kg
1,1,2, 2-Tetrachloroethane	5 ug/kg
Toluene	5 ug/kg
Chlorobenzene	5 ug/kg
Ethyl Benzene	5 ug/kg
Styrene	5 ug/kg
Total Xylenes	15 ug/kg
Dichlorobenzenes	15 ug/kg

TOTAL PETROLEUM HYDROCARBONS

Sample #1	67 mg/kg
Sample #2	47 mg/kg
Sample #3	147 mg/kg
Sample #4	18 mg/kg